ABSTRACT OF THE DISCLOSURE

A device for determining the angular position and rotation speed of a rotary member. The inventive device includes a sensor having a fixed part and a rotary part which is linked to the rotary member. The rotary part bears a magnetic flux generator, while the fixed part includes: a first probe which generates an electric signal having two different levels as a function of the angular position of the rotary member; and a second probe which is angularly offset in relation to the first probe and which generates an electric signal as a one-way function of the angular position of the rotary member for each segment of revolution corresponding to a level of the electric signal generated by the first probe. Analysis elements having elements for unequivocally defining the angular position of the rotary member, and for calculating the rotation speed of the rotary member are provided.